

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE  
ACADEMIC AFFAIRS

Course Number: CSE-250 3 cr. Class/Lect. Hours: 3 Lab Hours: 3 Credits: 4 Dept.: CSET  
Course Title: Information Storage Management Semester: Fall Year: 2015

**Course Description, Prerequisite, Corequisite:**

Information and Storage Management (ISM) moves beyond simple hard drive storage to the technology necessary to increase the reliability and flexibility for modern data centers. Course coverage includes data de-duplication, unified storage, continuous data protection technology, virtual provisioning, FCoE, flash drives, tiered storage, big data, and more. Details storage models such as RAID, Network Attached Storage (NAS), Storage Area Network (SAN), tape backup, and backup strategies. Virtualization at various infrastructure components is explored. Examines Business Continuity and Security in physical and virtualized environment. ISM may be taken before or after Virtualization using VMWare ESXi Server. This course is composed of a three hour lecture with a three hour lab.

Prerequisite(s): CSE-110 or permission of the instructor

Corequisite(s): CSE-250L 1 cr.

Course Objectives	Competencies
<p>Understand the technology of traditional and solid state disks.</p> <p>Understand data protection using RAID.</p> <p>Understand Intelligent Storage Systems.</p> <p>Understand Fiber Channel and Storage Area Networks (SAN).</p> <p>Understand Network Attached Storage (NAS).</p> <p>Understand backup methods and strategies for data protection.</p> <p>Understand local and remote data replication.</p>	<p>Describe common disk technologies. Format and diagnose problems in common disks.</p> <p>Describe RAID and choose a proper RAID level. Create RAID arrays using common hardware.</p> <p>Describe the components of an intelligent storage system. Describe storage provisioning.</p> <p>Describe a fiber channel disk configuration. Describe a fiber channel switched fabric. Describe a storage area network (SAN). Install and configure a typical SAN. Describe and configure an iSCSI connection to a SAN.</p> <p>Describe the benefits of a NAS. Describe the components of a NAS. Install and configure a typical NAS.</p> <p>Describe the business case for data protection. Describe the regulatory requirements for data protection. Describe common backup techniques and technologies. Perform backups on Windows and Linux.</p> <p>Describe local and remote replication techniques. Describe the basics of cloud computing.</p>